Thematic Planning for Technical Co-operation

Background and Definitions

The Agency's Technical Co-operation Programme is characterized by technical themes that that focus on techniques such as isotope hydrology. Some themes have application in several sectors such as water resources, geothermal energy, and agriculture. This terminology gives rise to the shorthand phrase, thematic/sectoral planning, often shortened further to thematic planning. This paper discusses the objectives, methodology, and expected benefits of thematic planning for Technical Co-operation.

Historically, Technical Co-operation themes were simply the sum of the research activities supported by the various Technical Divisions, which used medium term plans to set priorities. Applied research activities in various sectors by Member States then stimulated requests for support from the Technical Co-operation Fund. It is common to refer to this earlier situation as "technology-driven". Thematic planning did take place under this system, but only in the sense that research within sectors was followed by adaptation and application in the Technical Co-operation Programme. Over the years the number of sectors grew, as did the number of themes covered by Technical Co-operation projects. Currently just over 300 individual nuclear and isotopic techniques and applications are recognized in the Technical Co-operation project data base.

The Agency now faces new expectations. The Board has endorsed a new strategic goal: Technical co-operation with the Member States shall increasingly promote tangible socio-economic impact by contributing directly in a cost-effective manner to the achievement of the major sustainable development priorities of each country. This goal recognizes that nuclear science and technology can make important contributions to Member States development. This contribution is not always direct,

however, and thus the term Partner in Development conveys the requirements for broad collaboration in support of national priorities where nuclear science and technology can play a key role. As a result, the TC Programme is becoming increasingly oriented to meeting the priority development needs of Member States. It is intended to implement the new approach as "problem-driven" in order to emphasize that capacity building in nuclear technology must always be directed at meeting national development needs. Under this paradigm, thematic planning takes on increased significance.

The Model Project concept is at the center of the Partnership in Development approach. It places new demands on the thematic planning process by setting new criteria for project acceptance. These include 1) tangible socio-economic benefits through effective involvement of the end-user, the last link in the chain that connects nuclear institutes to the ultimate beneficiaries among the public at large; 2) a clear focus on high priority development needs; 3) strong government commitment; and 4) an indispensable role for nuclear technology with distinct advantages over non-nuclear alternatives.

The management objective for the TC Department is to extend the discipline of Model Projects throughout the entire TC Programme. Thematic Planning is one of two mechanisms for accomplishing this objective. However, systematic project formulation to meet Model Project criteria requires increased emphasis on pre-project planning, and achieving socio-economic benefit and sustainability demands project linkage and outputs that go beyond the traditional approach. How can we best identify those nuclear solutions that offer significantly greater benefit and cost-effectiveness than non-nuclear alternatives? How can these outputs be sustained? In a few cases, the experience is clear. For example, radiation and waste management safety are activities that offer "special value" for Member States, especially those with nuclear power sectors. But what is the comparative value of nuclear and isotopic technology in other sectors, particularly in isotope applications? And which offer the most promise of meeting major development needs? In which Member States is a particular technology most useful and cost-effective?

Objectives

Thematic Planning for Technical Co-operation is a strategic approach for resolving these questions. Thematic Planning provides a management tool by which the Agency can prioritize the Programme of Technical Co-operation to meet its Members' development needs most efficiently and effectively. Its goals are to establish priorities programme direction based on success criteria for capacity building and human development activities in selected themes or sectors, and build partnerships to achieve and sustain social and economic impact. This approach eventually should lead to clear technical priorities within Technical Co-operation, new partnerships and broader constituencies for nuclear techniques within Member States, and a defined set of programme objectives for the Agency's TC Programme.

Early experience

The initial experience in thematic planning has been positive, as exemplified by the reformulated Model Project, INT/9/143, to upgrade the radiation protection infrastructure of Member States. After global assessment of progress in meeting the Basis Safety Standards (BSS), country profiles were established outlining deficiencies. These profiles led to country action plans to systematically address any shortcomings, The overall goal is meeting BSS by the year 2000 for those 53 Member States participating in the project.

Once the broad technical outlines of the theme were established by the Agency, regional co-ordinators began working with counterparts in each country to arrive at detailed workplans. This crucial planning element --- adapting the theme to address individual needs efficiently and effectively --- is an important hallmark of thematic planning and an important link to country programming.

Another positive step is the emergence of sectoral planning within the AFRA organization. The setting of regional priorities undertaken within all the Regional Agreements is an important step in thematic planning.

The lessons learned so far have provided impetus to carry thematic planning further. It is the goal of the Technical Co-operation Dept. to have 5 - 6 thoroughly analyzed and agreed on plans in place by the year 2000, in addition to radiation protection.

Expected benefits

Thematic planning is a key activity for realizing the Partnership in Development concept. TC's approach for achieving tangible social and economic impact is to reach the end user with the benefits of nuclear science and technology. However, IAEA faces several limitations in reaching end users: a technical orientation, centralized management, modest technical cooperation resources that limit the scope and nature of activities, a counterpart structure that tends to be scientific and only indirectly associated with social and economic programmes. A key activity in Thematic Planning is planning projects and programmes with the right partners to overcome these limitations and maximize IAEA comparative advantages. It is expected that such partnerships will increase the impact of IAEA technical cooperation.

Thematic planning contributes to country planning by helping find the best match possible between the Agency's palette of technical co-operation options and the highest priority development needs of each country and region. It is a principal means by which the Agency can influence programme development based upon best practice experience and formal assessment processes such as evaluations and audit conclusions. The process of "unpacking" a theme explores the programme-problem context and helps forecast opportunities and constraints that either validates old or introduces new priorities. This has special value for aligning regular programme priorities. For instance, when a technical constraint is identified during the process, it often influences priorities for future co-ordinated research activities that fosters greater convergence between the TC Programme and the Technical Departments. The process brings greater coherence to the TC Programme based upon carefully reasoned assessment of past activities, present roles and responsibilities and future plans.

Thematic planning also contributes to resource mobilization objectives by presenting donor organizations and development agencies with priority programmes and initiatives that address common problems, through proven technological solutions and project designs, incorporating clear management and operational objectives in

common partnership with the principal stakeholders in a given theme. This approach is an operational reality for several organizations such as UNDP and FAO, where some of the principal donors to the IAEA Technical Co-operation Fund have agreements in place to finance thematic activities that meet specified criteria and objectives. It is reasonable to assume that this approach will increase the level of confidence that potential financial partners associate with projects which result from thematic planning because they have greater chance of success and lower the risk of failure than projects which are not based on success criteria. Thus, in competing for the tax dollars which finance grant technical co-operation activities, Agency Technical Co-operation projects that originate from such planning offer a comparative advantage.

To summarize, thematic planning will produce three types of benefit. It will:

- 1) build partnerships that help maximize the comparative advantages of IAEA TC;
- 2) align the Agency's technical, managerial and financial resources on 5-6 themes with clear comparative advantages; and
- 3) guide Member States to technical co-operation activities that offer better project quality, lower risks and greater opportunity for financial and operational partnerships.

The Thematic Planning Process

Sound thematic plans evolve from extensive, in-depth discussions among the Technical Divisions and the Department of Technical Co-operation. The initial targets for discussion will be the "mandated" activities of radiation protection, nuclear power plant operational safety, and waste management safety. Outside these areas, the key to setting priorities is straightforward: it must be clear that an activity can play a crucial role in addressing the development needs of many countries at reasonable

cost, if properly co-ordinated. Model Projects play an important role in guiding thematic planning because the criteria for selection requires quantifiable measures for relevance, sustainability and impact. Activities that either do not address development needs in a meaningful way, or which do so less well than non-nuclear alternatives, would not be likely candidates for thematic planning. Indeed, the continued relevance of such themes to the Technical Co-operation Programme needs careful assessment.

The second step involves understanding the broader problem context and establishing the preconditions associated with specific technology packages. A key activity is identifying the major stakeholders: problem holders, institutional support, technical advisors and financial support. It is also important to reflect the lessons learned from evaluations of past implementation activities and programme audits. An important outcome is to set out the pre-conditions for successful absorption of the technology, in terms of infrastructure, human resources, extension activities, and potential beneficiaries. The responsibilities of the Agency and of the counterparts need to be clearly spelled out.

A third step deals with matters of programme convergence. Here, the objectives are to define common objectives, align resources and plan joint activities. The Thematic Plan is complete when a country-by-country, or region-by-region review identifies the possible matches, taking opportunities, preconditions, and assumptions into consideration.

It is important to note that each step in the process can improve programme planning. For instance, if an assessment identifies that a Member State has a problem, but lacks the infrastructure to deal with it effectively, then a programming opportunity may exist to orient capacity building to make future attack on that problem feasible.

Because of the challenges involved, setting TC Programme priorities is not often an easy task, particularly when prioritization displaces established interests.

Therefore, mutual agreement between Technical Co-operation and Technical Departments will be necessary at each step in the process.

Centers of Excellence

Operative paragraph 6 of GC(41)/RES/13 seeks to facilitate and enhance technical and scientific co-operation among developing countries by promoting regional centres of excellence identified according to criteria and consultations with Member States. This approach compliments the TC Strategy to consolidate and utilize existing national and regional capacity.

The Secretariat has initiated work towards this objective through the Thematic Planning process. Several of the thematic plans now under development include assessments of institutional capabilities that can help guide future programming. The criteria for these assessments are developed in collaboration with expert consultants and Member State institutions and are based on Agency standards and accepted sources reflecting good international practice. The approach foreseen by the Secretariat for implementing the "centres of excellence" concept is to develop "consensus" criteria for assessing more advanced institutions through Thematic Planning, which would be submitted to Regional Agreement Co-ordinators, or to regional representative meetings where regional agreement mechanisms do not exist. Member States could then review the performance of more advanced institutions within the region against the criteria. The Agency could utilize such institutes as a project formulation-implementation partner. Through this co-ordinated effort, Member States will be able to participate in a framework to reach agreement for designated centres; and a new implementation mechanism will contribute strengthens TC strategic objectives and encourages technical support among Member States.

Programmatic impact

The thematic planning process is *not* meant to substitute for planning by recipient Member States, because it is not a programming modality. Instead, the process leads to informed programming choices. Formal thematic planning

documents will not be submitted to the Board for approval. Of course, the process may generate informal documents that summarize findings and provide guidance, but these documents will be internal to the Secretariat, to be accessed by Member States.

An obvious connection exists between thematic planning and regional programmes. While thematic planning can result in national project activities, it can also facilitate common strategies, institutional collaboration, and technical cooperation among developing countries. In future regional and interregional projects, manpower development and training activities will also depend more on thematic plans as project formulation criteria.

Thematic planning is intended to establish priorities. It results in working presumptions about which nuclear technologies can provide significant benefit to a given country or region, and how they should be applied. It is not a quick-acting cure. Rather, its lasting effects will be felt only over several program cycles, as high priority themes come to dominate both the project formulation and selection processes.

Thematic planning does not pre-empt country planning activities. It is a resource to be drawn upon and defined through the Country Programme Framework (CPF) process, in agreement with the Member State. However, some CPFs may not draw upon thematic plans. Depending upon the level of development attained by the Member State, programming requirements may suggest technological adaptations. The dynamic nature of technical co-operation will not be served by mechanical adherence to standardized approaches.

Thematic preference is but one of several factors that go into the decision-making that leads to project approval or rejection. Clearly, however, those projects that follow thematic planning guidance and align with the results of the CPF process and which are backed by strong government commitment, etc., are more likely to become candidates for financial support from non-traditional sources.

Communication to Member States

The success of Thematic planning will depend strongly on the effectiveness of communication with Member States. Both the Technical Divisions and Technical Cooperation need to take an active role in conveying to recipients the importance of priority themes and the underlying rationale for them. Each country and region must prioritize its needs, taking into account the thematic guidance from the Agency. Together with the CPF process, thematic planning is one of the principal means for extending the discipline of Model Projects throughout the Technical Co-operation Programme --- the central goal of the new Technical Co-operation Strategy.

The process of thematic planning is by nature collaborative, but occurs mainly with selected representatives of the major stakeholders of the theme. Effectively conveying the results of thematic planning to the Member States is a last, and ultimately crucial, step in the planning process leading to thematic priorities on a country-by-country or region-by-region basis. Benefits will flow from the planning effort only insofar as Member States act on the basis of priorities set by thematic planning when formulating requests.

Possible issues for future considerations

- What is the most appropriate criteria for assessing the Thematic Planning process?
- What other planning/prioritisation processes and procedures could guide the Tc Programme?
- What measures of "success" could help monitor the performance of Thematic Planning?
- If a Thematic Plan is unsuccessful should TC activities be discontinued?
- Should peer review and demonstrated value be the principal means to validate techniques and technical management.
- Should Thematic Planning attempt to define the limitations for Agency supported technical cooperation and the need for multi/bi-lateral linkage and synergy.

- Should TCF resources be allocated on the basis of Thematic Plans?
- How many themes should be covered? Should plans also cover non-priority areas such as those without an active model project to demonstrate benefits to end users?
- Is it valid to apply the Thematic Planning process to the Agency's regular programme?